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REMARKS

Claims 1-44 are pending in this application. Applicant is traversing the 35 U.S.C §101 - §103 rejection without amending the claims. Applicant believes that no new matter has been added by this Non-final Office Action Response.

35 U.S.C. §101

The Examiner rejected claims 30-38 under 35 U.S.C. §101 asserting that the claimed invention is directed to non-statutory subject matter. The Examiner stated that "claims are directed to a data signal that merely consists of "1" and "0" to represent the coded signal." The Examiner goes as far to state that the signal is functionally equivalent to the compact disc in that it is nothing more than a carrier for nonfunctional descriptive material (1's and 0's).

Applicant points out that computer readable-medium such as SDRAM computer memory contains only 1's and 0's and program steps contained in such memory are statutory subject matter. Similarly, microprocessors contain micro-code that is only 0's and 1's and are considered statutory subject matter. If the Examiner's definition of statutory subject matter were adopted in the current case, then computer-readable mediums such as memory, disks and CDs would also be non-statutory subject matter. Therefore, such a broad definition should not be applied to Applicant's claims.

Moreover, Applicant is not claiming, "computer data signal embodied in a carrier wave" or "0's" and "1's". The claim elements result in method steps being performed. Thus, if the signal is recorded in memory and accessed by a processor then the same signal being passed between memory and devices or contained in a carrier wave (such as a modem signal) being transferred from another country into a digital memory is statutory subject matter.

Therefore, Applicants' claims 30-38 are directed towards statutory subject matter and are in condition for allowance.

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Response to 35 U.S.C. §102 Rejection

The Examiner rejected claims 9, 10 and 14 under 35 U.S.C. §102(e) as being anticipated by Krasner (U.S. Patent No 6,289,041). The Examiner found that Fig. 4, block 404, column 5, lines 37-50 taught applying a Doppler shift correction value to the signal data. Column 5, lines 37-50 describe:

...the process of signal tracking and data demodulation according to one aspect of the present invention will be described. The digital frequency translation 404 circuit simply multiplies the I/Q input signal 402 by a exponential..., where f_d is the combined Doppler and LO frequency offset, T_s is the sample period and n is the running time index. This compensation is required so that the residual signal frequency error is much less than the PN frame rate...

The Krasner patent is describing a combined Doppler and LO frequency offset that is multiplied with the I/Q input signal rather than a Doppler shift correction value. The Krasner patent does show a dotted line labeled Doppler Sample Time Correction that is an input to 406, but this is not what is applied to the signal data. The Doppler and LO frequency offset is what is applied. This signal is opposed to Applicant's claim 9 element of, "applying a Doppler shift correction value to the signal data".

Furthermore, the Examiner states on page 6 of the Non-Final Office Action that, "Krasner discloses the operation of shifting the signal by a Doppler correction value is performed outside of the time domain signal processor." Thus, the correction value is performed outside of the time domain in the Krasner description.

Therefore, the Krasner patent fails to teach or describe; "determining a correlation between the Doppler shifted signal data and the code signal in a time domain" as claimed by Applicants. Also, the Krasner patent fails to teach or describe a Doppler shift correction value

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being applied to the signal data. Rather it teaches away from applying the Doppler shift correction to applying a combined Doppler and LO frequency offset. Thus, claims 9, 10 and 14 are in condition for allowance.

Response to 35 U.S.C. §103 Rejection

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Examiner rejected claims 1-3, 5, 7, 8, 11, 15, 17-24, 26, 28 and 29 under 35 U.S.C. 103(a) as being unpatentable over Krasner (U.S. Patent No. 6,289,041) and knowledge that was available to one of ordinary skill in the art at the time the invention was made.

Not all claim limitation taught or suggested by cited art

The prior art reference of the Krasner patent when combined with the knowledge that was available to one of ordinary skill in the art at the time the invention was made does not teach or suggest all of Applicant's claim limitations. As explained in the 35 U.S.C. §102 remarks, the Krasner patent fails to teach or describe a Doppler shift system operable to provide a Doppler shift correction value. Therefore, not all of the claim limitations are taught or suggested by the cited art. Applicant also respectfully disagrees with the Examiners use of functionally

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equivalents when identifying what would have been obvious to one of ordinary skill in the art. The Examiner has not provided any reference or support for the functional equivalents.

Therefore, claims 1-6 are in condition for allowance because not all elements are taught by the combination of references cited by the Examiner.

Must be some suggestion or motivation to combine

A prima facie case of obviousness requires that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings of the Krasner patent with knowledge known by one of ordinary skill in the art. The combination of the Krasner patent and knowledge known by one of ordinary skill in the art fails to describe all the elements claimed by Applicant, thus there can be no motivation to combine because at least one element would still be missing. Any such objective reason can only be found in the teaching of the application in suit.

Furthermore, the Examiner found that Krasner taught and described the Doppler correction value being performed outside of the time domain and thus does not teach or suggest the correction occurring in the time domain as claimed by the Applicant.

Therefore, the cited art cannot be combined because all the elements of Applicant's claims 1-3, 5, 7, 8, 11, 15, 17-24, 26, 28, and 29 are not found in the cited references.

There must be a reasonable expectation of success

Prima facie obviousness requires that there must be a reasonable expectation of success when prior art is modified or combined. There is no reasonable expectation of success in achieving the invention claimed when the Krasner patent, is modified with the knowledge of one of ordinary skill in the art at the time of the invention.

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As discussed above, the combination of cited art does not contain all the elements of Applicants' claims. Unless all the elements are taught by the references, there can be no success in combining the cited references. Therefore, there is no reasonable expectation of success if the Krasner patent is modified by one of ordinary skill in the art at the time of the invention.

Using the same reasoning, the combination of the Krasner patent in view of the Cahn et al. patent fails to teach or describe all of the elements of Applicants' claims 6, 12 and 27. Further, claims 6, 12 and 27 depend from allowable independent claims and also in condition for allowance.

Using the same reasoning, the combination of the Krasner patent in view of the Langberg et al. (U.S. Patent No. 5,852,630) patent fails to teach or describe all of the elements of Applicant's claims 39, 40, 41, and 44. Further, claims 40-44 are in condition for allowance because they depend from an allowable independent claim 39.

In summary, the combination of the above references does not meet the three basic criteria to establish a prima facie case of obviousness and Applicant respectfully submits that claims 1-3, 5-8, 11, 12, 15, 17-24, 26-29, and 39-44 are in condition for allowance.

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Allowable Subject Matter

Applicant acknowledges that claims 4, 13, 16, 25, and 43 are in condition for allowance if rewritten in independent form, and thank the Examiner for such findings.

Conclusion

In view of the foregoing discussion and the terminal disclaimer, Applicant respectfully submits that claims 1-44 as presented and in view of the remarks above are in a condition for allowance, for which action is earnestly solicited.

Respectfully submitted,

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